

Lesson Plan: Which One Doesn't Belong?

A: Standards

i. Key Content Standard:

3.G.2: Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole using words.

B. Objectives

i. Learning Objective/Goal:

Students will analyze partitioned shapes and construct arguments using fraction names to understand that a whole can be partitioned into equal parts or areas with equal measurement.

ii. Language Objective):

The students will construct arguments and critique the reasoning of others using words such as partition, equal parts, area, third, thirds, half, halves, greater, and lesser to justify their explanation or contribute to another students' thinking.

Introduction:

- Tell class we will be doing another Which One Doesn't Belong and continuing our work with fractions today.
- Chorally read MP 3: We can construct viable arguments and critique the reasoning of others.

Body of the Lesson:

- Prompt class to observe and analyze the four shaded in shapes drawn on the chart and to determine which one doesn't belong and why.
- Provide about 30 seconds of individual think time. (Wait time)
- Tell students to do a "turn and talk" with the person next to them and to explain which one they believe doesn't belong and why.
- Countdown from 5 to tell class their time is up.
- Tell students to give a "quiet thumb" if they have made their decision for which one doesn't belong. Provide wait time.

- Take a “silent vote” by telling students to put up fingers 1 through 4 to tell which shape they believe doesn’t belong. (A-1, B-2, C-3, D-4)
- Call on students to come up and construct their argument to the class for which one doesn’t belong and why?
- Possible Student Responses:
 - *I believe that C doesn’t belong because it is cut down the middle and doesn’t look even.*
 - *D doesn’t belong because it is a square and the others are circles.*
 - *All of the shaded parts are the same size.*
- Possible Teacher Responses/Questions:
 - *Does anyone have another argument?*
 - *Would anyone like to critique ___’s argument?*
 - *Can someone repeat ___’s argument?*
 - *So you are looking at the way it’s partitioned?*
 - *How is that shape different from the others?*
 - *Is this shape symmetrical?*
 - *So I want to push on your language a little bit. What do you mean by _____?”*
 - *So how would you want the shape to be cut for it to be equal?*
 - *Would anyone like to argue for another shape not belonging?*
 - *Should we measure the shape with a ruler to double check?*
- Desired Responses/Vocabulary:
 - *Thirds*
 - *One Third*
 - *Area*
 - *Shaded*
 - *Part of the Whole*
 - *Not one half*
 - *Less than one half*
 - *Symmetrical/ Not symmetrical*
- While students provide arguments and critiques, teacher writes vocabulary and key concepts that the students mention on the chart. Teacher also must listen to students’ responses to determine what questions to ask and how to respond.

Closure:

- Teacher points at each shaded portion and asks, “Is this one third?” Class should respond yes.
- Teacher asks the class to “turn and talk”: In this “Which one doesn’t belong”, what did you learn about fractions?

- Call on a few students to share what they talked about with their partner. Teacher writes key lesson takeaways on bottom of the chart.
- Prompt class to return to their desks and complete an exit ticket: Draw a shape that represents one fourth.